Fermilab

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Director's Office

July 23, 1999

Mike Tuts
Harry Weerts

Dear Mike and Harry,

Thank you for Mont's presentation on the status of the D0 Upgrade Project to the Fermilab Physics Advisory Committee (PAC) at its June meeting in Aspen. The Committee discussed both the CDF and D0 Upgrade Projects at the meeting, and had the following comments:

"The Committee listened to presentations about the Collider upgrade projects and schedules from both CDF and D0. Both collaborations have recently completed a DOE Project Review (Lehman review), and the Committee was presented with the central recommendations of that committee.

The roll-in schedules of both detectors are limited by the production and delivery of silicon sensors by Micron. Although production has significantly improved due to the efforts of both collaborations with Micron, delivery completion dates are still uncertain and estimates range from January to March 2000. Both collaborations expect to be ready for final roll-in about six months after this completion date.

CDF is also having difficulty with its SVX3 chips both in production and in assembly onto hybrids; at present these problems are not quite on the critical path, but they are a concern. Other systems are progressing very well, and all systems other than the silicon tracker are expected to be ready for roll-in by March 2000. CDF has proposed roll-in for the engineering run without its silicon detectors during March-June 2000, followed by final roll-in with silicon in November. Without this engineering run, CDF could be ready for final roll-in with silicon in September 2000. D0 has had problems with the Fiber Tracker construction and Mini-Drift-Tube production, both of which are near the critical path for a proposed roll-in schedule for July 2000. The Lehman committee expressed serious concern about the D0 schedule, describing it as "brittle," and asked D0 to provide a re-evaluated schedule. Both collaborations have been asked for updated milestones spanning the period until roll-in.

Work is also proceeding with "Beyond-the-Baseline Upgrades" in both collider detectors. CDF has been able to obtain funding to support a new L00 silicon layer, which will be installed with the inner detector before roll-in. It is proceeding with work on the time-of-flight system and has secured about 70% of the needed funding. D0 is also proceeding with

work on a forward detector and a track trigger, and has obtained partial funding for each of these.

W. von Rüden presented a report from the recent review by the Offline Review Committee for Run II Upgrade of the offline computing developments in both experiments. This report was very positive and concluded that no further reviews are needed before roll-in. Both collaborations and the Computing Division have made excellent progress, and the common CDF/D0/CD projects in particular have been quite successful. Although the von Rüden committee made a number of specific recommendations, there were no major problems or serious concerns. The PAC congratulates the von Rüden committee as well as the collaborations and the Laboratory on their impressive progress."

I would like you to present another update at the November 5-7, 1999 PAC meeting.

Sincerely,

Michael Witherell

cc: H. Montgomery